

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 A61K39/39 A61P37/04 A61P31/04

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, BIOSIS, CHEM ABS Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	SATO YUKIO ET AL: "Adjuvant effect of a 14-member macrolide antibiotic on DNA vaccine" CELLULAR IMMUNOLOGY, vol. 197, no. 2, 1 November 1999 (1999-11-01), pages 145-150, XP002316892 ISSN: 0008-8749 the whole document	1-18
X	TOMASIC JELKA ET AL: "The effect of cefodizime and related compounds on humoral immune response in rabbits" ACTA PHARMACEUTICA (ZAGREB), vol. 44, no. 2, 1994, pages 109-116, XP008042733 ISSN: 0354-2971 the whole document	1-18

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \* & \* document member of the same patent family

Date of the actual completion of the international search

11 February 2005

Date of mailing of the international search report

28/02/2005

Name and mailing address of the ISA  
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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WOO PATRICK C Y ET AL: "Antibiotics modulate vaccine-induced humoral immune response" CLINICAL AND DIAGNOSTIC LABORATORY IMMUNOLOGY, vol. 6, no. 6, November 1999 (1999-11), pages 832-837, XP002316893 ISSN: 1071-412X the whole document	1-18
X	YANG D ET AL: "Mammalian defensins in immunity: more than just microbicidal" TRENDS IN IMMUNOLOGY, ELSEVIER, CAMBRIDGE, GB, vol. 23, no. 6, 1 June 2002 (2002-06-01), pages 291-296, XP004365772 ISSN: 1471-4906 the whole document	1,3,4, 14,17
A	CONFER A W ET AL: "Immunogenicity of recombinant Mannheimia haemolytica serotype 1 outer membrane protein PlpE and augmentation of a commercial vaccine" VACCINE, BUTTERWORTH SCIENTIFIC. GUILDFORD, GB, vol. 21, no. 21-22, 20 June 2003 (2003-06-20), pages 2821-2829, XP004429680 ISSN: 0264-410X abstract	1-18
A	WO 98/56802 A (PFIZER PRODUCTS INC; BRONK, BRIAN, SCOTT; LETAVIC, MICHAEL, ANTHONY; K) 17 December 1998 (1998-12-17) cited in the application claims	1-18
A	US 6 339 063 B1 (KROPP HELMUT ET AL) 15 January 2002 (2002-01-15) column 1, line 1 - column 2, line 56	1-18

**Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)**

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:  
  
Although claims 14-17 are directed to a method of treatment of the human or animal body, the search has been carried out and based on the alleged effects of the composition.
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

**Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)**

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

**Remark on Protest**

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 9856802	A	17-12-1998	AP 1231 A	11-12-2003
			AT 251173 T	15-10-2003
			AU 749816 B2	04-07-2002
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